GEORGIA INSTITUTE OF TECHNOLOGY — OFFICE OF CONTRACT ADMINISTRATION

PROJECT ADMINISTRATION DATA SHEET

[X] ORIGINAL [ ] REVISION NO. _____

Project No. E-23-505 DATE 2/19/82

Project Director: Dr. Donald L. Vawter School/~~Lab~~ ESM

Sponsor: The University of Virginia

Type Agreement: Subcontract No. 5-26392 (under NSF Prime SED-80-19647)

Award Period: From 11/1/81 To ~~10/31/82~~ 7-31-83 (Performance) _____ (Reports)

Sponsor Amount: $15,185 Contracted through:

Cost Sharing: $12,423 (E-23-213)* GTRI/~~GIT~~

Title: Development of Computer Aided Instructional Modules in Engineering Science and Mechanics

ADMINISTRATIVE DATA OCA Contact Faith G. Costello

1) Sponsor Technical Contact:

John E. Gibson
The 4C Consortium
University of Virginia
Charlottesville, Virginia 22901

2) Sponsor Admin/Contractual Matters:

D. Wayne Jennings
Acting Director, Office of Sponsored Programs
University of Virginia
P.O. Box 9003
Charlottesville, Virginia 22906

Defense Priority Rating: N/A Security Classification: N/A

RESTRICTIONS

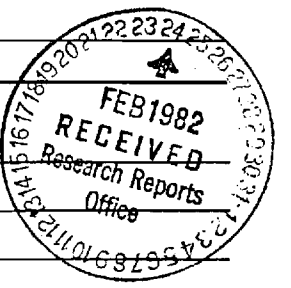
See Attached NSF Supplemental Information Sheet for Additional Requirements.

Travel: Foreign travel must have prior approval – Contact OCA in each case. Domestic travel requires sponsor approval where total will exceed greater of $500 or 125% of approved proposal budget category.

Equipment: Title vests with GIT, if purchased with cost-sharing funds.

COMMENTS:

*Additional cost sharing funded through in-kind contributions.



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FORM OCA 4:781

GEORGIA INSTITUTE OF TECHNOLOGY OFFICE OF CONTRACT ADMINISTRATION

SPONSORED PROJECT TERMINATION/CLOSEOUT SHEET

Date 12/9/86

Project No. E-23-505 School/~~Dept~~ ESM

Includes Subproject No.(s) N/A

Project Director(s) Donald Vawter GTRC /~~GAXX~~

Sponsor The University of Virginia

Title Development of Computer Aided Instructional Modules in Engineering Science and Machanics

Effective Completion Date: 7/31/83 (Performance) _____ (Reports)

Grant/Contract Closeout Actions Remaining:

- [ ] None
- [X] Final Invoice or Final Fiscal Report
- [ ] Closing Documents
- [ ] Final Report of Inventions
- [ ] Govt. Property Inventory & Related Certificate
- [ ] Classified Material Certificate
- [ ] Other _____

No further reporting requirements per Brian Lindberg.

Continues Project No. _____ Continued by Project No. _____

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Other A. Jones
I. Lashley
R. Embry

E-23-503

Georgia Institute of Technology
Atlanta, Georgia 30332

College of Engineering
School of Engineering Science and Mechanics

August 4, 1982

The 4C Consortium
University of Virginia
Charlottesville, Virginia 22901

Attention Larry G. Richards
Engineering College

Subject: Progress of Research Proposal "Development of Computer Aided Instructional Modules in Engineering Sciene and Mechanics"

Dear Dr. Richards:

It is time, or past time, to inform you of the progress of our effort to develop modules in our mechanics courses.

We have successfully developed a series of 21 programs to be used as instructional aids in the teaching of Mechanics of Deformable Bodies. I have enclosed a copy of the programs which will run on an Apple II+ system. A User's Guide is enclosed also. The programs were written in Applesoft Basic. More on this in a moment.

The programs we have developed are in use in at least eight colleges and universities in the country. We have used them in our Strength of Materials courses for both engineers and architects.

We have also written a Finite Element Mesh Generator program which has been used in our graduate level course. The program is written in Apple Pascal.

We have published the results of some of our work. In addition to the User's guide I have enclosed page proofs for an article which will appear in the September issue of Mechanical Engineering. Also enclosed is a draft of an article accepted by the COED journal of ASEE. Reprints will be forwarded when received.

We sense a definite limitation in the work done so far. Namely, the programs can only be used on an Apple system. In order to ensure transportability of the programs we are rewriting them in p-system Pascal. This operating system is compatabile with the Apple, the Xerox PC, the IBM PC as well as the DEC mini's and Micros. One importantant feature is that the graphics package is relatively machine independent. One does have some scaling parameters to adjust but this is much better than the Hires graphics in Applesoft or the Turtlegraphics unit in Apple Pascal. We feel development of machine independent code is very much in keeping with the Consortium's goals.

We would like to ask for an extension of the time period for operation of this contract. We have run into some difficulties implementing the p-sytems Turtlegraphics. If the contract could be extended until 30 June 1983 it would be greatly appreciated. There would be no increase in expenditures beyond those of the originally approved budget.

If there is any additional information needed I will be happy to comply. An early decision on our request for an extension would greatly aid us in planning our effort for the following year.

Sincerely,

Donald L. Vawter
Asst. Professor of ESM
Georgia Tech
Atlanta, Ga. 30332

xc: M.E. Raville
GTRI/OCA